
Support for Hospital-Based HIV Testing and Counseling: a National Survey of Hospital Marketing Executives

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Synopsis

Today, hospitals are involved extensively in social marketing and promotional activities. Recently, investigators from the Centers for Disease Control and Prevention (CDC) estimated that routine testing of hospital patients for human immunodeficiency virus (HIV) could identify more than 100,000 patients with previously unrecognized HIV infections.

Several issues are assessed in this paper. These include hospital support for voluntary HIV testing and AIDS education and the impact that treating AIDS patients has on the hospital's image. Also tested is the hypothesis that certain hospitals, such as for-profit institutions and those outside the AIDS epicenters, would be less supportive of hospital-based AIDS intervention strategies.

To assess these issues, a national random sample of 193 executives in charge of hospital marketing and public relations were surveyed between December 1992 and January 1993. The survey was part of an ongoing annual survey of hospitals and included questions about AIDS, health education, marketing,

patient satisfaction, and hospital planning. Altogether, 12.4 percent of executives indicated their hospital had a reputation for treating AIDS patients. Among hospitals without an AIDS reputation, 34.1 percent believed developing one would be harmful to the hospital's image, in contrast to none in hospitals that had such a reputation ($\chi^2 = 11.676$, $df = 1$, $P = .0006$). Although 16.6 percent did not know if large-scale HIV testing should be implemented, a near majority (47.7 percent) expressed some support.

In addition, 15 percent reported that HIV-positive physicians on the hospital's medical staff should not be allowed to practice medicine, but 32.1 percent indicated that they should. Also, 33.1 percent thought the hospital should be more involved in AIDS education. Finally, certain hospital characteristics, such as location and for-profit status, were not associated with support for hospital-based AIDS interventions. Contrary to what was hypothesized, however, hospitals in AIDS epicenters were less supportive of the CDC recommendations for some reason ($\chi^2 = 7.735$, $df = 1$, $P = .005$).

Support for AIDS education and voluntary testing is significant among hospital marketing and public relations executives. Over the past decade, community marketing and public relations have become an integral part of the hospital's business activities. However, financial pressures now are forcing hospitals to restrict these efforts. Findings reported in this paper suggest that future health care reform may assist public health aims by redirecting these endeavors towards the fight against AIDS and other preventable diseases, not eliminating them. Additional research is needed to determine why executives in AIDS epicenters are less supportive of large-scale hospital HIV testing and counseling in comparison with those outside these areas.

IT IS BELIEVED THAT MANY infected with the human immunodeficiency virus (HIV), the infection that causes acquired immunodeficiency syndrome (AIDS), do not know they are infected (1). One hospital-based study estimated that 110,000 patients with HIV infection could be identified by large-scale voluntary

testing of hospital patients (2). Based on analysis of 195,829 anonymous blood specimens from 20 U.S. hospitals, investigators in this study found seroprevalence rates ranging from 0.2 to 14.2 percent for type 1 HIV infection (2). Data analysis suggested that routine voluntary HIV counseling and testing

among 15–54-year-old patients in hospitals with 1 or more newly diagnosed HIV infections annually per 1,000 patients would be an efficient strategy (2).

Although there has been criticism of this study's methodology (3), hospital-based AIDS interventions may make sense for several reasons. First, the majority of patients seen in other health care settings often receive little information related to HIV disease (4,5). Second, patients should have better access to counseling, clinical referral, evaluation, and therapy in hospitals in comparison to other free-standing facilities (2). Third, a significant proportion of the U.S. population is hospitalized annually, with greater than 110 acute-care hospital discharges estimated per 1,000 population (6).

Overview

Although policy guidelines for hospital-based HIV interventions are now available (7), questions remain. Recently, some hospital administrators expressed concern about the recommendations of the Centers for Disease Control and Prevention (CDC) (8). In addition, one recent survey found the public fearful of receiving care at hospitals that treat AIDS patients (9). The negative reactions of some administrators, possible public concerns, and few alternatives for large-scale voluntary testing, make evaluation of hospital-based interventions important.

Based on a national survey of hospital marketing and public relations executives, several issues are examined in this paper. One is support for large-scale voluntary HIV testing. A second is support for AIDS education. A third is the perceived public relations impact that treating AIDS patients has on the hospital's image. Also tested is the hypothesis that executives in for-profit hospitals, in nontertiary care hospitals, and those in hospitals located within low-prevalence AIDS areas are less supportive of large-scale, hospital-based AIDS interventions.

The private hospital system. The majority of patients hospitalized in the United States are admitted to private, acute-care hospitals. Currently there are about 5,300 of these facilities; approximately 4,200 have 50 beds or more (10,11). Implementing successful large-scale intervention programs in these hospitals may not be easy, because their governance, administration, and financial structures are complex. To a large extent, successful hospital administration depends on developing a consensus among groups often with competing interests—such as hospital board members, private physicians, clinical staff, and professional administrators (12,13). Consequently, for

large-scale health intervention programs to be feasible, they must be consistent with the mission and administrative goals of these institutions. For reasons explained subsequently, those in charge of marketing and public relations in hospitals can offer important insights on implementing hospital-based public health interventions, including voluntary HIV testing and AIDS education programs.

Marketing and public relations in private hospitals. In response to the reimbursement reform in the 1980s (14), “marketing” health care services became a major focus for hospitals. The reason for this focus was because the incentives became cost controls and expanded the hospital's market share in profitable areas (15). One legacy of this development was the expansion of hospital marketing and public relations departments and activities (16–18). Today, hospitals have incorporated marketing into their long-range planning and have implemented community and institutional surveillance systems to monitor public opinion, patient satisfaction, and quality care (19,20). Hospital marketing and public relations executives are now responsible for a wide range of promotional and planning activities (19) and are an integral part of the hospital's financial and administrative management (12,13,15,21).

Because of their strategic positions, marketing executives are generally knowledgeable about issues affecting the hospital's image, the marketing and public relations implications of developing new programs, and about hospital support for health promotion programs (22). Knowledge of the attitudes and opinions of these executives is critical if hospital-based AIDS interventions are to be successful for several reasons. First, these interventions must be voluntary and, thus, should have community- and hospital-based support. Second, during the past 10 years hospitals have developed considerable expertise in marketing and public relations and have invested substantially in these areas (16,17,19,22). Third, most private hospitals are involved in ongoing public relations and marketing activities, and their combined efforts could potentially reach a huge proportion of the U.S. population quickly and cost effectively (19).

Limitations of previous research. While there have been studies of AIDS knowledge, attitudes, and beliefs among nurses, physicians, dentists, and medical students (23–26), studies of health care executives and managers in hospitals are extremely limited. One survey of 250 hospital administrators found that 36.3 percent believed the AIDS epidemic had affected their hospitals financially, and 78.9

percent indicated that the epidemic would have a major financial impact in the future (27).

According to another survey of 389 hospital administrators, hospitals that had more experience in treating AIDS patients were more likely to have employee AIDS policies than those with less experience (28). It also was reported that administrators in hospitals experienced in treating AIDS patients were more "authoritarian" about treating these patients. For example, they tended to minimize the need for informed consent before testing patients for the HIV virus, in comparison with administrators in hospitals with less experience treating these patients (28).

Methods

The ongoing National Hospital Marketing Survey (NHMS) is designed to monitor marketing, planning, and public relations activities in U.S. hospitals. To achieve this goal, a stratified random sample of approximately 200 persons in charge of marketing and public relations are surveyed annually by telephone. Only hospitals in the contiguous United States are selected for these surveys. Also, government facilities, those with less than 50 beds, psychiatric, rehabilitation, and other nonacute-care facilities are excluded. In addition, the sample is stratified by U.S. census division and hospital bed size. The U.S. census strata include New England, Middle Atlantic, South Atlantic, East North Central, West North Central, East South Central, West South Central, Mountain, and Pacific. The hospital bed-size strata include 50–99 beds, 100–199 beds, 200–299 beds, 300–399 beds, and 400 or more beds.

For the 1992 survey, interviews were attempted with 260 hospital executives and completed with 193, representing a 74-percent completion rate. A total of 56 executives (22 percent) refused to be interviewed, and 11 (4 percent) were unavailable for interview during the survey period. The survey lasted approximately 15 minutes and only one respondent was interviewed per hospital. All interviews were conducted by trained executive interviewers located in a central telephone facility.

For each selected hospital, interviewers were instructed to speak with the executive "in charge of marketing" at the hospital. For smaller hospitals, this was sometimes the chief executive or the chief financial officer; for larger hospitals, this was typically the director or vice president of marketing. In hospitals, marketing and public relations often are overlapping activities under the direction of one person or within the same department, similar to

Table 1. Profile of 193 private hospitals surveyed: comparison with the American Hospital Association's statistics, 1992

<i>Hospital demographics</i>	<i>Percent surveyed¹</i>	<i>Percent of U.S. hospitals²</i>	<i>95 percent confidence interval</i>	
U.S. census region:				
North	18.7	17.6	13.4,	24.9
Midwest	25.9	27.8	19.9,	32.7
South	38.9	37.4	32.0,	46.1
West	16.6	17.2	11.6,	22.6
Multi-hospital system: ³				
Yes	50.3	45.8	43.0,	57.5
No	46.1	54.2	38.9,	53.4
For-profit hospital:				
Yes	16.6	14.8	11.6,	22.6
No	80.3	85.2	74.0,	85.7
Number of beds:				
50–99	30.1	29.6	23.7,	37.1
100–199	30.6	31.2	24.2,	37.6
200–299	13.0	17.7	8.6,	18.5
300–399	10.9	9.5	6.9,	16.1
400 or more	15.5	12.0	10.7,	21.4
Payor mix: ⁴				
Medicare	35.6	...	33.1,	38.2
Medicaid	27.0	...	24.8,	29.2
Commercial, Blue Cross	24.5	...	22.0,	27.1
HMO	11.3	...	9.5,	13.1
No insurance	8.2	...	6.4,	10.0
Hospital care level:				
Primary, secondary ..	80.3	...	74.0,	85.7
Tertiary	16.6	...	11.6,	22.6

¹Percents do not total exactly 100 because of rounding and missing data.

²Based on American Hospital Association's statistics for private community, acute-care hospitals with 50 beds or more (10,11).

³Defined as 2 or more hospitals in a system.

⁴Based on average hospital percents reported by survey respondents.

small businesses (19). Using this selection criterion, only about 2 percent of hospitals were excluded from the survey because they had no one in charge of marketing. In addition, marketing executives were not always located within hospital marketing departments, but were in other departments such as public relations or administration. About 20 percent of U.S. community hospitals have less than 50 beds and were excluded from this survey (10). Altogether, up to five calls were made to complete an interview.

The hospital demographic and marketing questions in the 1992 survey had been used in NHMS studies since 1982. The HIV–AIDS questions were specifically designed for the 1992 survey based on a review of the existing literature related to surveys of medical and health care professionals. These questions had face validity, were pretested, and incorporated standard Likert-scale response categories used in previous NHMS studies (copies of the survey questions can be obtained from the senior author). All new survey items were pretested and modified based on pretest results and interviewer feedback.

Table 2. Profile of marketing and public relations (PR) activities reported by 193 executives in private hospitals, 1992

Executives' activities	Percent ¹	95 percent confidence interval	
Department location:			
Marketing.....	30.6	24.2,	37.6
PR, communications, media relations.....	30.1	23.7,	37.1
Administration.....	14.0	9.4,	19.7
Other.....	24.4	18.5,	31.0
Major responsibilities: ²			
PR, communications, media relations.....	67.9	60.8,	74.4
Advertising, promotion.....	46.6	39.4,	53.9
Market research.....	30.6	24.2,	37.6
Planning.....	30.6	24.2,	37.6
Other.....	28.0	21.8,	34.9
Reports to:			
CEO,COO.....	79.3	72.9,	84.8
Senior vice president.....	11.4	7.3,	16.7
Other.....	7.8	4.4,	12.5
Principal marketing goal:			
Increase patient census, market share.....	32.1	25.6,	39.2
Develop or identify new services.....	21.2	15.7,	27.7
Develop public relations.....	20.2	14.8,	26.6
Other.....	24.4	18.5,	31.0

¹Percents do not total exactly 100 because of rounding and missing data.

²Percents are based on multiple responses.

Table 3. Support for CDC's recommendations and support for AIDS education among 193 private hospital marketing executives, 1992

Involvement and response	Percent ¹	95 percent confidence interval	
Hospital should be involved in routine voluntary HIV testing as recommended by CDC:			
Strongly agree.....	14.5	9.9,	20.3
Somewhat agree.....	33.2	26.6,	40.3
Neither agree nor disagree.....	24.4	18.5,	31.0
Somewhat disagree.....	7.8	4.4,	12.5
Strongly disagree.....	3.6	1.5,	7.3
Don't know.....	16.6	11.6,	22.6
Current hospital involvement in AIDS education efforts:			
A great deal.....	14.0	9.4,	19.7
A fair amount.....	13.0	8.6,	18.5
Some.....	24.9	18.9,	31.6
Very little.....	25.9	19.9,	32.7
None.....	9.3	5.6,	14.3
Don't know.....	13.0	8.6,	18.5
How much more should hospital be involved in AIDS education efforts:			
A great deal more.....	6.2	3.3,	10.6
Somewhat more.....	26.9	20.8,	33.8
Continue current effort.....	47.2	39.9,	54.5
Somewhat less.....	1.0	0.1,	3.7
A great deal less.....	0.0	0.0,	1.9
Don't know.....	18.7	13.4,	24.9

¹Percents do not total exactly 100 because of rounding and missing data.

For this study, univariate and bivariate statistical results are presented. For univariate statistics, ordinary confidence intervals were calculated using *Stata, Version 3.1* (29). Cross tabulations and bivariate tests for statistical significance were performed using *SPSS/PC+™, Version 5* (30). Bivariate tests of significance were based on the Pearson chi-square statistic. If results were statistically significant, exact *P*-values are reported in the text of this report.

Results

Table 1 profiles the characteristics of the hospitals surveyed. It shows that 38.9 percent of hospitals were in the South, 50.3 percent were part of multi-hospital systems, 16.6 percent were for-profit institutions, 26.4 percent had 300 beds or more, and 16.6 percent were tertiary care facilities. As this table shows, the demographic profile of the sample hospitals was similar to those reported by the American Hospital Association for nongovernment, acute-care, community hospital with 50 beds or more in terms of census region, bed size, multi-hospital membership, and for-profit status (10,11). Altogether, 35.6 percent of patients at these hospitals were reported to be Medicare recipients, and 8.2 percent were reported to have no insurance at all.

A total of 30.6 percent of executives indicated they were in marketing departments, and 30.1 percent indicated public relations, communications, or media relations departments (table 2). In addition, 67.9 percent indicated their responsibilities included public relations and communications, 46.6 percent advertising and promotion, 30.6 percent market research, and 30.6 percent indicated planning. In addition, 79.3 percent indicated that they reported to chief executive officers (CEOs) or chief operating officers (COOs), and 32.1 percent indicated that increasing the "patient census" or "market share" was their principal marketing goal (table 2).

To evaluate support for HIV testing of patients, CDC's hospital testing recommendations were described and the managers were then asked to indicate their agreement with this policy. Although 16.6 percent said that they "didn't know" how to rate this policy, a near majority (47.7 percent) "strongly" or "somewhat" agreed with the CDC's recommendation. In addition, 24.4 percent indicated that they "neither agreed nor disagreed" with this policy. Furthermore, only 11.4 percent disagreed "somewhat" or "strongly" with the CDC's recommendations (table 3).

Altogether, 27 percent reported the hospital was currently involved in AIDS education "a great deal"

or "a fair amount," and 35.2 percent reported involvement to be "very little" or "none." Nevertheless, 33.1 percent indicated the hospital should be "a great deal more" or "somewhat more" involved in these efforts in the future. In addition, although 47.2 percent indicated the hospital should just continue its current AIDS education efforts, virtually none (1 percent) believe it should be *less* involved in these activities (table 3).

Altogether, 12.4 percent of executives reported that their hospital "definitely" or "probably" had a reputation for treating AIDS patients (table 4). Regardless of the response to this query, executives were asked if they thought such a reputation harmed or improved (or would harm or improve) the hospital's public image. Although 40.9 percent indicated that this had or would have no effect, 30.1 percent believed that it had caused or would have caused "some" or "a great deal of harm" to the institution's image. A total of 4.1 percent reported that such a reputation had improved (or would have improved) the hospital's image "somewhat" or "a great deal."

Although the nearly one-third of executives who believed that developing a reputation for treating AIDS patients had been (or would have been) harmful to the hospital's image, only 3.6 percent reported the hospital actually experienced any negative publicity in the last several years because of treating AIDS patients, regardless of the hospital's AIDS reputation (table 4). However, as noted subsequently, among executives in hospitals *without* an AIDS reputation, 34.1 percent believed that developing one would be harmful to the hospital, in contrast to no one in the hospitals that had such reputations (chi-square = 11.676, *df* = 1, *P* = .0006).

Research has shown that a considerable proportion of adults have concerns about receiving medical care from physicians who are HIV positive (31,32). Among those responsible for hospital marketing and public relations, 15 percent believed that HIV-positive physicians on the hospital's medical staff should *not* be allowed to practice medicine, while 32.1 percent believed they should "probably" or "definitely" be allowed (table 4). A total of 40.9 percent indicated that it would depend on the situation, and 11.9 percent reported that they did not know whether physicians should be allowed to practice or not.

To test the hypothesis that support for AIDS interventions varied by hospital type and location, survey results were cross-tabulated by hospital characteristics and these are presented in table 5. These data suggest that support for the CDC's testing

Table 4. AIDS care and the hospital's public image reported by 193 private hospital marketing executives, 1992

Experience or perception	Percent ¹	95 percent confidence interval	
Hospital has reputation for treating AIDS patients:			
Yes, definitely	6.2	3.3,	10.6
Yes, probably	6.2	3.3,	10.6
No, probably	52.8	45.5,	60.1
No, definitely	26.9	20.8,	33.8
Don't know	7.8	4.4,	12.5
Having or developing a reputation for treating AIDS patients: ²			
Harms image greatly	4.7	2.2,	8.7
Harms image somewhat	25.4	19.4,	32.1
Has no effect	40.9	33.9,	48.2
Improves image somewhat	3.6	1.5,	7.3
Improves image greatly	0.5	0.0,	2.8
Don't know	24.9	18.9,	31.6
Negative publicity from treating AIDS patients:			
Yes	3.6	1.5,	7.3
No	84.5	78.6,	89.3
Don't know	11.9	7.7,	17.3
HIV positive physician should be allowed to practice at hospital:			
Yes, definitely	17.6	12.5,	23.7
Yes, probably	14.5	9.9,	20.3
Uncertain, depends on situation	40.9	33.9,	48.2
No, probably	5.2	2.5,	9.3
No, definitely	9.8	6.0,	15.0
Don't know	11.9	7.7,	17.3

¹Percents do not total exactly 100 because of rounding and missing data.

²Results are combined for hospitals with and without a reputation for treating AIDS patients. See table 5 for statistical results for this question stratified by whether the hospital had an AIDS reputation or not. They indicate that among executives in hospitals without an AIDS reputation 34.1 percent believed that developing one would be harmful to the hospital's image, in contrast to none in hospitals that had such reputations (chi-square = 11.676, *df* = 1, *P* = .0006).

proposal is associated with hospitals focused on increasing patient census (chi-square = 4.02, *df* = 1, *P* = .045), located in higher prevalence AIDS areas, but not the highest (chi-square = 8.36, *df* = 2, *P* = .015), and with hospitals that have a reputation for treating AIDS patients (chi-square = 5.92, *df* = 1, *P* = .015). In addition, current involvement with AIDS education is associated with tertiary care hospitals (chi-square = 3.81, *df* = 1, *P* = .051) and hospitals with an AIDS reputation (chi-square = 5.13, *df* = 1, *P* = .023).

Perceived harm to the hospital's image was associated with hospitals that were not part of a multi-hospital systems (chi-square = 4.03, *df* = 1, *P* = .045) and, as previously noted, hospitals that did not have a reputation for treating AIDS patients (chi-square = 11.68, *df* = 1, *P* = .0006). Support for increased AIDS education was not associated with any of the hospital characteristics evaluated. In addition, executives supporting hospital-based HIV testing believed the hospital should be more involved

Table 5. Support for recommendations of the Centers for Disease Control and Prevention, AIDS education, and perceived harm to hospital image, by hospital characteristics, 1992

Hospital characteristics	Total ¹		Percent responding yes to—			
	Number	Percent	Support CDC	Involved in AIDS education	Need more AIDS education	AIDS harms image
Region:						
North.....	36	18.8	38.9	33.3	27.8	22.2
Midwest.....	50	26.2	56.0	22.0	40.0	36.0
South.....	73	38.2	47.9	28.8	30.1	30.1
West.....	32	16.8	43.8	21.9	37.5	28.1
Multi-hospital system: ²						
Yes.....	95	49.7	47.4	29.5	31.6	³ 23.2
No.....	96	50.3	47.9	24.0	35.4	36.5
For-profit hospital:						
Yes.....	36	18.8	44.4	16.7	22.2	36.1
No.....	155	81.2	48.4	29.0	36.1	28.4
Number of beds:						
Less than 200.....	116	60.7	48.3	25.9	37.9	33.6
200 or more.....	75	39.3	46.7	28.0	26.7	24.0
Hospital's Medicaid patient population: ⁴						
30 percent or more.....	64	33.5	46.9	29.7	32.8	32.8
Less than 30 percent.....	127	66.5	48.0	25.2	33.9	28.3
Hospital's care level:						
Primary, secondary.....	159	83.2	47.2	³ 23.9	34.6	30.2
Tertiary.....	32	16.8	50.0	40.6	28.1	28.1
Hospital's primary marketing goal:						
Increase patient census.....	58	30.4	³ 58.6	31.0	29.3	34.5
Other goal.....	133	69.6	42.9	24.8	35.3	27.8
Reported AIDS cases per 100,000 population: ⁵						
Less than 1 per 100,000.....	135	70.7	³ 49.6	28.9	34.8	33.3
1–19 per 100,000.....	35	18.3	57.1	20.0	40.0	25.7
More than 19 per 100,000.....	21	11.0	19.0	23.8	14.3	14.3
Reputation for treating AIDS patients:						
Yes.....	24	12.6	³ 70.8	³ 45.8	33.3	⁶ 0.0
No.....	167	87.4	44.3	24.0	33.5	34.1
OK to have HIV-positive physician on staff:						
Yes.....	61	31.9	52.5	29.5	³ 45.9	27.9
No.....	29	15.2	51.7	31.0	37.9	31.0
Don't know.....	101	52.9	43.6	23.8	24.8	30.7
Support CDC's recommendations:						
Yes.....	91	47.6	...	28.6	³ 40.7	29.7
No.....	100	52.4	...	25.0	27.0	30.0
Hospital involved in AIDS education:						
Yes.....	51	26.7	51.0	...	33.3	27.5
No.....	140	73.3	46.4	...	33.6	30.7
Hospital should be more involved in AIDS education:						
Yes.....	64	33.5	³ 57.8	26.6	...	31.3
No.....	127	66.5	42.5	26.8	...	29.1
Perceived harm to image treating AIDS patients:						
Yes.....	57	29.8	47.4	24.6	35.1	...
No.....	134	70.2	47.8	27.6	32.8	...
Totals.....	193	100.0	47.7	27.0	33.1	30.1

¹Percents do not total exactly 100 because of rounding and missing data. Also for the rating questions the categories were collapsed to simplify the cross-tabulation. For example, the "definitely" and "probably" categories were combined, as were the "greatly" and "somewhat" and the "strongly" and "somewhat" categories. In addition, "a great deal" and "a fair amount" also were combined, as were the "very little" and "none" categories. Affirmative responses to these questions are classified as "yes" in table 5.

²Defined as 2 or more hospitals in a system.

³ $P < .05$.

⁴Based on average hospital percents reported.

⁵Based on Centers for Disease Control and Prevention: "HIV/AIDS Surveillance Report, Year-End Edition," February 1993. CDC provides AIDS surveillance data for the major metropolitan areas only. About 85 percent of reported AIDS cases are in these areas. Consequently, some hospitals in nonmetropolitan areas may be misclassified as being in an area with a lower AIDS case rate.

⁶ $P < .001$.

in AIDS education (chi-square = 3.99, $df = 1$, $P = .046$). Finally, those who believed it was all right to have HIV-positive physicians on the hospital's medical staff also supported additional hospital-based AIDS education programs (chi-square = 7.94, $df = 2$, $P = .019$).

Discussion

About 48 percent of hospital marketing and public relations executives believed that their hospital should implement the CDC's testing recommendations. About one-third reported their hospital was currently involved "a great deal" or "a fair amount" in AIDS education programs, and about one-third indicated that the hospital should be more involved in the future.

Survey findings also suggested that having a reputation for treating AIDS patients did not inherently result in community image problems, which has been a fear of some hospital administrators (33). In fact, none of the executives that reported their hospital had an AIDS reputation indicated that the hospital had image problems because of this.

Given their position in the hospital system, marketing and public relations executives are the ones who would be aware of this situation, were it to exist, so their perceptions should be taken seriously. While one-third of executives in hospitals *without* an AIDS reputation felt that the hospital might have image problems if it developed this reputation in the future, and about 11 percent were not supportive of CDC's proposal, there was considerable support for both hospital-based AIDS testing and AIDS education. In addition, there does not appear to be less support for these policies among for-profit hospitals, smaller hospitals, or among hospitals outside of the main AIDS epicenters.

One puzzling finding warrants further discussion. This relates to the finding that executives in the highest prevalence AIDS areas (that is, in areas with 20 or more cases reported per 100,000 population) were less likely to support the CDC testing recommendations (table 5). To determine if the opinions of executives in the highest AIDS areas were significantly different from those in the two lowest AIDS areas, we collapsed the two lowest categories and compared them with the highest. The results were statistically significant (chi-square = 7.735, $df = 1$, $P = .005$), suggesting that executives in high-prevalence AIDS areas are less supportive of CDC's testing proposal.

There could be several reasons for this finding, all related to the fact that many of these hospitals were

'Although the nearly one-third of executives who believed that developing a reputation for treating AIDS patients had been (or would have been) harmful to the hospital's image, only 3.6 percent reported the hospital actually experienced any negative publicity in the last several years because of treating AIDS patients, regardless of the hospital's AIDS reputation . . .'

located in the major AIDS epicenters. For example, it is possible these executives believe that large-scale, voluntary HIV testing already has been implemented in their areas. Another possibility is that executives in high-prevalence areas may be more pessimistic about implementing large-scale testing because they have had more experience with this activity than executives in low-prevalence areas. Although we cannot confirm these conjectures, these are important research questions that need to be addressed in the future research.

Conclusion

The future of hospital marketing. Currently, hospitals are under tremendous pressures to reduce costs and operating expenses (34–36). During the 1970s, health planning and regulation were used to control costs but, during the 1980s, deregulation and competition were employed (36,37). Within this environment, marketing and public relations activities grew extensively (19). The failure of this deregulation policy meant that new health reform would be forthcoming. It is likely that this reform will reduce hospital marketing and public relations activities, because there will be a greater emphasis on managed care or single-payor plans, which will compel administrators to focus on cost containment and maintaining quality standards. Recent research indicates that hospital marketing and advertising expenditures have begun to drop dramatically in recent years, suggesting that a downward trend is already occurring (38).

However, public health experts have advocated a greater role for social marketing and mass media interventions to reduce sexually transmitted diseases, HIV infection, and other preventable diseases (39–43). Marketing and public relations techniques are now well developed in the United States (44–46) and,

as noted, these methods have been adopted by private hospitals over the past decade (16–18,47,48). Today, private hospitals spend billions of dollars to achieve marketing objectives (19). In addition, hospitals in the United States are involved extensively in the provision of health education, wellness, fitness, family planning, psychiatric, substance abuse, and social work services (10), a point often overlooked by those outside the industry.

Given these functions, instead of reducing hospital marketing activities under health care reform, the opposite may make more sense. For example, if incentives can be offered to focus these activities on public health objectives rather than on strictly financial ones, the outcome would be different. It is possible for future reimbursement reform, at least in theory, to provide incentives for hospitals to implement community-level prevention and health education programs.

Developing these incentives for hospitals should not be difficult. A comprehensive, long-range public health plan already exists. The Public Health Service's Healthy People 2000 plan has identified specific objectives designed to reduce heart disease, cancer, stroke, injuries, HIV infection, and other significant public health problems (49). Policy makers could use the plan as a blueprint to design incentives for hospitals to promote public health, rather than market expensive and unneeded services. Getting hospitals to redirect their promotional efforts towards public health objectives may not be as far-fetched as it seems, especially among nonprofit facilities. Recently, it has been reported that many nonprofit hospitals, concerned about losing their tax-exempt status, are now starting new or expanding old community service programs (50).

Implications for public health. The survey results presented in this paper seem promising. While some marketing and public relations executives may have fears about developing a reputation as an "AIDS hospital," a substantial proportion of them are supportive of large-scale voluntary HIV testing and believe their hospitals should be more involved in public AIDS education efforts. Noteworthy was that a near majority supported large-scale, hospital-based testing. Given findings such as these, the elimination of hospital marketing activities under reimbursement reform may be shortsighted. One option might be to convert marketing and public relations departments into health education and health promotion offices. Another may be to integrate wellness, health education, health promotion, and outpatient rehabilitation services into the total acute care delivery system (51).

In either case, refocusing health care delivery on a public health agenda may not only be important for fighting the AIDS epidemic, but may also provide other long-term public health benefits. Nevertheless, private hospitals have evolved into very complex organizations (12,13), and structural changes may be difficult. Implementing large-scale HIV counseling and testing in hospitals has inherent difficulties, such as receiving informed consent from sick patients (52). Based on its recent survey, the CDC's hospital testing recommendations have been updated (7). Key CDC recommendations are that patients give informed consent in accordance with local laws, that hospitals develop specific policies regarding testing and counseling, that patient confidentiality be assured, that services *not* be offered in an emergency setting, and that patients who decline testing or who test HIV positive not be denied needed medical care (7).

It is clear that the future holds unique opportunities for social marketing and community health promotion. This research suggests that, at least in terms of HIV prevention, private hospitals may be more ready to embrace the public health challenge than was previously thought. Although the cost of delivering high quality, hospital-based HIV testing and counseling services throughout the United States would require outside funding, hospitals seem more receptive to large-scale voluntary HIV testing and counseling than we expected. That executives in AIDS epicenters are less supportive than others of hospital HIV testing is an unexpected finding, and we plan to investigate possible reasons for this in the future.

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